

LIBBY ASBESTOS
SITE

OU 2

mei Parker

COMMENTS ON PROPOSED PLAN FOR OU-2

Sub area 1

Your proposal comments for O-U 2 on page #8 simply states that for each alternative evaluated, institutional controls and engineered controls would be implemented to protect human health and the environment. IC'S are actions, such as Restrictive covenants, Zoning Ordinance, Easements, Deed Restrictions and Building permits based on the intent use of the property.

When you came to clean -up our property in 2000 it was a Reforestation Nursery Landscaping nursery, a Herbal garden nursery, a Vegetable plant nursery, a Botanical flower arboretum and a Reishi medical co-operative that utilizes hardwood trees growing in soil medium to spawn mushrooms that are used to combat cancer in Japan and China.

The bottom line is that you folks came onto our property with the "intent" of a total 100% removal of any and all asbestos contamination.

We were going to be back on our property, ready to rebuild the entire nursery operation in 6 months. NO problem!

When you finished the clean-up and the restoration there would be no deed restrictions or institutional controls, what so ever. see enclosure

You knew we were primarily a "Nursery" operation and working with soil was our business.. That, folks, is why you demolished everything we owned. Simply to allow us to start our business over again, without having to address the "stigma" of the past and the possibility of exposing contaminated soil to our employees, our customers, service personal, family, and contracting agencies. Our property was "Organically Certified" for five years prior to the clean-up. If you have contaminated containment on the land you wish to certify you can not do so! We did not know that our property at the former screening plant was contaminated and therefore a threat to Public health. as well as our own.

With your commitment to implement IC'S on all alternatives on all operating units regardless of known or possibly contained asbestos you certainly must realize that you are substituting "In lieu of" a scientific risk assessment based on Toxicology and Epidemiological research studies which will provide a reassuring level of comfort for Public health.

You promised us a valid risk assessment when you informed my wife and I that we would not receive a Notice of Availability for our property until all response actions had been addressed. This language was a primary part of the reimbursement agreement that was signed by both the EPA, my wife, and I.

COMMENTS ON PROPOSED PLAN FOR OU-2

Sub area 1

You backed this up with a Document issued on Nov.27-2000 by Wendy Thomi labeled "Draft Sampling Plan for Phase 2 of Asbestos Exposure Investigation . (enclosed).

We encourage you to read it carefully.

No where! and I mean No where! does this document say anything about "Risk Assessment as it is Scientifically related to "Exposure Pathways."

You failed this community when Jim Christensen made the decision to clean-up the contamination in Libby and not invest in the studies recommended in the enclosure document. This action set us back six years. Which is quite evident through-out your "Proposed Plan for Public Comment.

Mel Parker

(13)
GE-1

* RELATING TO NO#-2 APRIL 24/2001
OF MR. CHRISTIANSEN'S RESPONSE. (36)

MEL PARKER'S INTERPRETATION OF THE
FINAL RESTORATION PLAN.

- OK
4/26
- 1) ALL VERMICULITE/ASBESTOS MATERIAL RELATED TO W.R GRACE OPERATIONS AT THE SCREENING PLANT WILL BE REMOVED. THIS WILL PROVIDE A NON-DEED RESTRICTION ON THE PROPERTY AFTER THE CLEAN-UP.

Comments Relating to OU -#2 Sub Area -1

Let it be known, that as owners of Sub-Area #1 within Operating Unit #2 we do not feel comfortable endorsing a Record of Decision at this time. Based on the following comments, it becomes very evident that much in the way of studies, research, evaluations, improvement (analytical methods); is necessary before a viable conclusion can justify moving forward with a permanent Record of Decision.

Relating comments: to Sub Area - #1 in OU #2

Comment #1

1.) We do not currently have enough information to estimate cancer and non-cancer risks from community exposure to LA associated with OU-#2.

Comment #2

2.) Activity based sampling related to OU-#2, which would simulate people hoeing, rototilling, digging, screening, mixing, planting, potting soil that would be used to augment the purpose of operating a diversified commercial nursery similar to the Raintree Nursery that existed on the property prior to 2000, was never done!

Comment #3

3.) Do you honestly feel that the use of PLM has been a successful analytical tool to determine the actual toxicity of soil samples taken on sub- area-1 OU #2.

As you well know, our property, was completely demolished so that it could be "Cleaned" up 100% with no containment or concerns about existing contamination at other than five foot levels below the surface. I certainly agree with Mr. Sloan comment from the DEQ " The Libby Amphibole content of visible vermiculite needs to be quantified using appropriate (TEM) tools and recognized that it is not currently a valid clean-up standard for the. ROD. PLM is not capable of identifying levels protective to human health.

4.) I can't understand, when it is stated, that there is a potential exposure to airborne asbestos from pathways which exist but have not been identifies because of a failure to use the proper analytical method. What is the problem?

Comments Relating to OU -#2 Sub Area -1

Comment #4

Exhibit- #4

Summary of investigations at Sub Area - #1 OU#2 states that in 2003 soil samples were done on the mass of roots of trees planted on the property. Each of those (many) trees were balled & burlapped with soil taken from a Nursery in Bonners Ferry, ID. Those balls of soil roots were 24" in. in depth and 42 in. in width, and weighing 100 pounds plus. The sampling results are invalid and the situation is *ludicrous*.

- "Pathway eliminated by past response action."

This comment applies to Sub Area #2 OU-#2 because the only building remaining on OU-#2 is the pump house on the Flyway property.

Comment #5

You refer to the low spots on OU-2 but fail to identify which sub-area in which they are located. in this reference, the Flyways Sub- Area has back washes from Kootenia River which the owner filled in with soil adjacent to the pump house. This soil was heavily mixed with vermiculite and the final objective was to increase the river front property on this tract of land.

The property of Sub-Area -1 OU #2 is on a sloping bench - 30 ft above the Kootenia River and does not have low spots.

Proposal for Sub Area - 1 on OU -#2 shows on Exhibit - #5 in 2003 that there was removal of vermiculite contaminated soil and granular pad during installation of potable water well.

Comment: #6

The "well log" does not identify the existence of vermiculite - asbestos (LA) in the core samples what so ever. The well driller was from Butte, MT because he was licensed to operate under Environmentally Hazardous conditions. The granular pad was hauled away by him and for sure the "vermiculite contamination" was not sampled. So the term "contaminated" becomes *Ludicrous*.

Comments Relating to OU -#2 Sub Area -1

If I may detract for a moment! You have sub-divided OU#2 into Sub Areas 1, 2, 3, and 4. As you address information which you provide in the OU-2 proposal there is a tendency to cross pollinate between whether you are talking about OU-#2 as a combined unit or sub area - #2 as the Flyways but you refer to it is OU-#2 . As familiar as I have become with this area, I am confused.

Comment # 7

Does the EPA honestly believe that ***ALL*** exposure pathways have been broken through past responses or recent investigations has found them to be below levels of concern? Specifically in Sub Area-#1 OU #2.

The answer is simply — No they have not.

The EPA admits that the ecological risk relative to OU-#2 Sub- Area#1 has not been addressed for OU-#2 Sub- Area #1. EPA will be conducting a comprehensive assessment of ecological risks as part of the. OU-3 (Mine Site). This is a very important point, simply because the Mine Site has exposure pathways that currently and adversely impact how the ROD should be addressed for Sub-Area-#1 on OU-2.

We need to be transparent with each other in the effort the EPA is talking to Remedial the Mine Site to a level that protects not only the stability and integrity of the Rainy Creek drainage but to make sure that all decisions made in the effort to attain this goal are taking into consideration the health, safety and well being of those things which surround them.(e.g.) Public and Private Property, Environment, human safety.

Mr. Kettlelaper and Ms Rebecca Thomas have very effectively stated that “they hope all concerns from the community come to surface during the Public Comment period so that the EPA can produce a remedy that works”.

A Toxicity Assessment and a valid Epidemiological Summary prior to a ROD would be nice - would it not? This combination establishes a solid baseline Risk Assessment toward cleaning this community up to a health standard that is acceptable to all of us.

November 27, 2000

NOTE:

TO: CAG Members
FROM: Wendy Thomi

TECHNICAL DATA
REGARDING "HOW" THE EPA
WAS SCHEDULING THE TOXICITY;
EXPOSURE STUDIES.

VERY IMPORTANT!

Greetings! I'm sending for your review two documents sent to me by Chris Weis.

The first is the Draft Sampling Plan for Phase 2 of the asbestos exposure investigation. You are invited to comment on the Plan through January 1, 2001. You will have an opportunity to ask questions about it at the December 14 CAG meeting. Chris Weis is planning to be at that meeting. Please send your comments to Paul Peronard or Chris Weis. You can comment by e-mail, voice mail or send a hard copy to them.

Paul's e-mail address is peronard.paul@epa.gov.

Paul's phone is 303-312-6808

The address is:

EPA Region 8 (8EPR-ER)

999 18th St. Suite 300

Denver, CO 80202-2466

Chris' e-mail is weis.chris@epa.gov.

Chris' phone is 303-312-6671

The address is:

EPA Region 8 (8EPR-PS)

999 18th St. Suite 300

Denver, CO 80202-2466

The second document is a Draft Statement of Work (SOW) for Dr. Wayne Berman which describes the development of the risk assessment methodology Paul has talked about at CAG meetings. We thought you might be interested in taking a look at it just to see what we're working on. Dr. Wayne Berman's work will be an important component of the risk assessment. He is one of several scientists participating in the development of the risk assessment. This SOW describes some of the activities Dr. Berman is being asked to complete in preparation for the peer review of EPA's risk assessment methodology for asbestos. EPA hopes the Peer review will be completed by the end of the summer, or a little earlier.

I'm looking forward to seeing you at the next CAG meeting and the last one of 2000. Please give some thought to the kind of schedule you'd like to see in 2001.

Thank you. I hope you had a nice Thanksgiving.

SCOPE OF SERVICES

WORKPLAN FOR REVISING THE "METHODOLOGY FOR CONDUCTING RISK ASSESSMENTS AT ASBESTOS SUPERFUND SITES"

1.0 INTRODUCTION

The US Department of Transportation's John A. Volpe National Transportation Systems Center (Volpe Center) is providing environmental engineering and related support to Region 8 of the US Environmental Protection Agency (EPA). This Volpe Center support includes activities, such as the preparation of technical documents, development of program management plans, environmental assessments / investigations, remediation projects, and emergency response. Volpe's Environmental Engineering Division (DTS-33) has been providing EPA, Region 8 with immediate environmental engineering and site assessment support at Libby, MT, since late November 1999. Volpe has been supporting with investigations to monitor, sample and characterize asbestos-containing materials that may be present in the community and the areas of former vermiculite mining activities, as well as time critical Removal Actions based on the findings of these investigations. *RISK ASSESSMENT*

Human health risk from asbestos is primarily due to inhalation exposure to airborne fibers. In order to identify if there is an ongoing risk from asbestos to the Libby community it was determined that the currently accepted approach to asbestos risk assessment may be insufficient. The current model is based primarily on studies and research from the 1970s and 1980s and doesn't take into account advances in research that have occurred over the last twenty years. More recent scientific evidence suggests that fiber morphology (size & shape) is the most critical factor in the pathogenicity of the material. Scientific evidence also suggests that mineralogy plays a very important role and that the risk (dose response) for Lung Cancer and Mesothelioma are not the same. The current practice of asbestos risk evaluation attributes risk to all asbestos fibers regardless of morphology or mineralogy, and combines lung cancer and mesothelioma risk. It also doesn't take into account technological advances in analyzing for airborne asbestos fibers. It attributes risk to Phase Contrast Microscopy (PCM) equivalent fibers as a measure of exposure, since historical exposure measurements are based on estimates of either total particle counts or PCM fibers. PCM can not distinguish between asbestos and non-asbestos fibers. PCM also has a limited magnification and therefore is not able to "see" small asbestos fibers and therefore would under estimate the actual asbestos exposure and risk. Using the old method of modeling for risk may significantly under estimate the risk to the Libby community for the above reasons. Especially due to the fact that investigative efforts have determined that historical and ongoing exposure in Libby has been to amphibole rather than serpentine (chrysotile) asbestos. Recent research indicates that amphiboles may be 6 times more potent in inducing lung cancer and 100 times more potent in inducing mesothelioma than chrysotile.

Under this task, relevant asbestos studies (including primarily those published after 1994) will be identified and their abstracts evaluated. Although the epidemiology evaluation from the original protocol was only current as of 1989, so that epidemiology studies from periods as early as 1989 and related, supporting studies, will also be collected and evaluated for inclusion in analysis.

**

Key studies identified based on this initial screen will then be acquired for more formal review, evaluation, and reconciliation with the literature already reviewed during development of the risk assessment protocol (Berman and Crump 1999).

For this evaluation, the Contractor shall perform literature reconciliation for the purpose of verifying the validity of conclusions from key studies with respect to the limitations imposed by the manner in which asbestos concentrations are measured or estimated in each of the key studies. The degree of consistency (or conflict) across studies will then be noted. Following the completion of Task 1 the Contractor will provide the following:

- A Revised Bibliography of Identified Literature. - The bibliography should be formatted using a spreadsheet to identify the literature identified, extent of review (abstract, complete study, etc.), relevancy (not relevant, "key study", etc.), and if applicable the outcome of reconciliation (consistent, potential conflict, not relevant, etc.). Reporting the bibliography via a spreadsheet will enable the literature to be queried and searched rapidly to meet future informational inquiries.
- Copies of Key Studies. - Copies of all key studies shall be provided on both electronic and hardcopy as available. Studies which contain personal medical information and/or are otherwise not publicly available (e.g. Confidential Business Information, CBI) may be: (1) retained by the Contractor; (2) returned to the originator; or (3) stored under USEPA Privacy Act Provisions as deemed necessary by the Contractor in consultation with the Volpe POC (see Section 7.0).
- Summary of Findings. - A brief report indicating whether potential conflicts exist that suggest substantial data in conflict with the proposed model and the Contractor's interpretation of available literature. The nature of potential conflicts will be identified.

2.2 Task 2 – Review of Libby (EPA Project Specific) Risk Documentation

Under Task 2 the Contractor will, upon request, review and comment on Libby Project Risk Documentation. The documentation shall be reviewed for consistency with the existing Superfund model, relevant researched documents, and corresponding informational requirements. Potentially relevant documents may include, but not be limited to sampling and analysis plans. Under this task the Contractor shall provide written comments on provided documents and participate in conference calls to discuss the Contractor's review. For estimating purposes the Contractor shall assume needing to review four relevant documents.

2.3 Task 3 – Data Collection and Organization

are not limited to those related to the Quebec mines, one or more of the asbestos textile plants, and the Wittenoom crocidolite mine,

- (3) For the same selected subset of key studies as (2) above, the original researchers will be queried to determine whether archived air filters and/or appropriate bulk material is available for re-analysis. The new analysis will be performed in order to derive revised, sophisticated characterizations of the nature of exposures (including information on fiber size and type), which can be normalized to exposure level estimates from the existing studies. This data will be used to provide improved overall exposure characterizations for the selected studies.
- (4) If original samples are determined to be unavailable the Contractor shall assist with identifying potential relevant alternative samples, such as acquiring ore samples and mill-product samples from the Quebec and the Crocidolite mines in Australia.

SIGHT SELECT SAMPLING!

Regardless of whether historical or alternative representative exposure samples are acquired for analysis by Volpe (see 3 and 4 above) the Contractor shall need to work with Volpe and Volpe team laboratories to assure analyses are performed appropriate to obtaining the right kind of data in a usable format. Thus for example the Contractor will need to assist with the development of SOPs for analyzing these samples. Analytical results derived from the sample analyses will need to be evaluated to derive size distributions for the relevant study environments, which can be used to adjust estimated exposures from these studies to account for fiber size and type.

2.3.2 Data Relevant to "New" Human Epidemiology Studies

Similar to the activities under Section 2.3.1 above, the second effort will involve obtaining and reconciling data from new epidemiology studies not previously considered. These studies will be identified as part of the literature review conducted under Task 1. Activities similar to those identified in the last section for refining mortality and exposure level data and for generating improved characterization of the nature of exposures may also need to be performed by contractor for these new studies not previously considered. Such studies may include, but are not limited to, the Libby mine and mill and the upstate New York talc mines.

2.4 Task 4 – Model Review & Development

Under Task 4 the Contractor shall reevaluate appropriateness of the current mesothelioma model being used to derive recommended risk factors and exposure indexes (see Section 2.4.1 below). In addition to the current and potentially "out of date" mesothelioma model the Contractor shall determine and evaluate an alternative model. The Contractor will then compare the results and recommend the most appropriate model to be used. The Contractor will also develop a similar model to address lung cancer risk (see Section 2.4.2 below).

from which the raw data could be obtained. The models will then be applied to the published data from the remaining epidemiology studies, by incorporating whatever exposure assumptions are required. All such assumptions will be properly documented. Note that the lung cancer model also requires the evaluation of smoking histories, which must also be tracked and distributed within the person-years of the database.

Following the completion of Task 5 the Contractor shall provide a detailed report indicating the results from the modeling effort specifically in regards to risk factors, exposure indices, and supporting information. All assumptions, mathematical representations, or derivations used to estimate exposure, dose, toxicity or physiological response or used to model original or published data will be clearly reported in the context of the recommendations and results provided.

2.6 Task 6 - Complete Modifications and Revisions to Finalize Existing Methodology

Once the literature evaluation, sample analysis, model development, evaluation of exposure and mortality data from selected studies, and updates to the evaluation of the epidemiology database are complete (Tasks 1, 3, 4, & 5), the "Methodology for Conducting Risk Assessment at Asbestos Superfund Sites" will be revised accordingly.

Methodology revisions shall address all relevant text, figures, and tables of both the Protocol and companion Technical Background Document (Parts 1 & 2 respectively), including revisions to referenced appendices.

3.0 DELIVERABLES

The Contractor shall be prepared to provide both hard and electronic copies of all deliverables, unless otherwise directed or discussed. In addition to the deliverables identified within the above sections, the Contractor shall be prepared to provide copies of all data (raw & reconciled), modeling results, and supporting documentation generated under this task contract. Studies which contain personal and/or medical information and/or are otherwise not publicly available (e.g. Confidential Business Information, CBI) may be; 1) retained by the Contractor, 2) returned to the originator, or 3) stored under USEPA Privacy Act Provisions as deemed necessary by the Contractor in consultation with the Volpe POC (see Section 7.0).

4.0 **SCHEDULE**

****** The Contractor shall be prepared to begin providing support as identified within this contract ASAP upon receiving a NTP. All activities performed under this contract needs to be completed by June 30, 2001, although the Tasks 6 needs to be completed by March 31st.

IS THERE A POTENTIAL FOR A DISASTER IN THIS REGION!

Eleven inches of rain in five days in 2006

Editor's note: This is part of a Daily Inter Lake series tracing major stories from the past decade.

By JIM MANN
The Daily Inter Lake

Over a five-day period in the fall of 2006, Glacier National Park was hit with the flood of a decade, if not decades.

"It seems pretty clear this was an historic event," said one park ranger soon after the deluge that caused severe damage to Going-to-the-Sun Road and other parts of the park.

From Nov. 2 through Nov. 7, 11.5 inches of rain was recorded at an automated weather station on Flattop Mountain, and on Nov. 7 alone, 8.5 inches of rain fell. All of the moisture came down on a foot of snow

that had an additional two inches of water content.

What followed were cascades of water descending



Glacier National Park file photo

THE RAGING floodwaters of McDonald Creek washed out this horse bridge on the west side of Glacier National Park in November 2006.

through many of the park's central and northern drainages, overwhelming creek channels and causing lakes to

rise by several feet.

In the Many Glacier Valley, Swiftcurrent Lake rose to a level where its outlet was overwhelmed and water was crossing over the only road to Many Glacier Hotel. The lower floor of the hotel was flooded with about six inches of water at one point.

But the heaviest and most expensive damage was on Sun Road.

The worst of it was just east of Logan Pass, below the East Tunnel, where there were three washouts. Two of them left much of the road intact, but the largest wiped out both lanes, creating a chasm spanning more than 100 feet.

"It's a big, big hole," Ranger Matt Graves said at the time. "It's significant because there's no material. Everything's gone."

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Mel & Lerah Parker
PO Box 609
Libby, MT 59923

Project Officer
Montana DEQ
PO Box 200901
Helena, MT 59620-0901

Jan. 7, 2010

Mr. Richard Sloan:

As per our conversation on Jan. 04, 2010 we exchanged information relative to the waste material from the EPA clean-up in Libby. As we are both aware of, at this point, in time, I received a conference call on Jan. 04, 2010 Rebecca Thomas (Region-8 in Denver CO., Bonnie Lavelle (region 8 in Denver Co.) and Mr. Mike Cirian (Libby Project Manager in Libby, MT.).

The discussion with these folks dealt with the transfer of the contaminated material from the Libby Clean-up site to the WR Grace Mine for Disposal.

Mr. Cirian commented that to date there had been in excess of 550 thousand cubic yards hauled up to the top of the mine site and 120 thousand cubic yards had been deposited across the Rainy Creek Road from the lower pond. This area has been referred to as the amphitheater. In 2007 (approx) the EPA began to off load the trucks coming from Libby at the amphitheater and allowing them to go back to Libby to reload. The intent was to reload the waste on different trucks that would specifically haul from the amphitheater (staging area) to the top of the mine site.

What is disturbing to me Mr. Sloan, is that Mr. Cirian has stated that the Army Corps of Engineers, who are currently in partnership with EPA in the Libby clean-up has recently completed a field "survey" of the amphitheater site to determine the feasibility of depositing additional contaminated material at this location. Apparently the EPA thinking at this time centers on not hauling anymore loads to the top of the mine but rather utilize the amphitheater as the permanent location for the 120 thousand cubic yards, in place, plus whatever else is available from Libby. I must make it clear Mr. Sloan so that there is no confusion. Mr. Cirian emphasized that it would be contingent on the final results of the data completed on the field survey by the Corps of Engineers. Mr. Cirian feels strongly that the amphitheater site could accommodate three times more than what is currently there. You, sir, have informed me that you are planning on coming to Libby to review the site on behalf of the DEQ and for that promise my wife and I are truly grateful.

Yesterday, my wife and I gave a presentation to the Libby County Health Board members which relates to what this letter is all about. Enclosed please find a series of photographs that were very recently taken of the amphitheater site.

Mel & Lerah Parker
PO Box 609
Libby, MT 59923

These were a portion of the presentation yesterday plus we used aerial maps to put the situation at the mine in perspective to the board. At the close of the meeting the members (County Commissioners, City Mayor, Card President and City Council Members and others) indicated that they would certainly want to go up to the amphitheater to observe for themselves what my wife and I had discussed with them. I suppose that weather conditions would certainly affect the feasibility of doing so at this time.

One other issues I would like to address Mr. Sloan, is that of the "Draft Environmental Assessment" for the WR Grace Vermiculite Mine Closure Plan that was made public by the Department Of State Lands Hard Rock Bureau on Aug. 19, 1992. It has been a very useful guideline to me recently in my concerns as to what the State has done and is required to do at the WR Grace Vermiculite Mine after its closure. As I have reviewed and read the list of tables on Page. V1 of the introduction, it is very obvious that Water Management is a primary concern. After reading this document it is encouraging to know that the State of Montana is still very much involved and committed to the future of the Rainy Creek drainage.

A question I have, that to me and My wife is very important at this time, is simply this! You folks drafted and documented the Environmental Assessment in 1992 based on existing conditions.. Due to the EPA plan to possibly use the amphitheater location as a permanent location for contaminated asbestos waste which could amount to over 300 thousand cubic yards, is it going to be required by the "State" to re-assess the Environmental Assessment .

We certainly hope so.

The EPA "Record of Decision" for Operating Unit-2#, which is the former Screening Plant located on the lower reach of Rainy Creek below Hwy 37, is due for final comments on Jan. 16, 2010.

We honestly feel that a very substantial "Exposure Pathway" has been created by the EPA and should be addressed by all concerned parties and State agencies in the very immediate future. Needless to say, a high run off this Spring could adversely impact Rainy Creek where it flows by the amphitheater and the existing concentration of contaminated waste from the Libby clean-up site. .

Sincerely,



Mel & Lerah Parker

cc: Sandi Olson
Richard Oppen

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e. **The Rainy Creek Road:** Amphibole asbestos has been spread onto Rainy Creek Road, evidently in at least three ways. According to Alan Stringer, (current president of KDC, the Grace point of contact in Libby, and former Grace mine manager in Libby) asbestos containing materials, possibly tailings and/or pyroxene sands, were used to sand the roads in winter. This is consistent with the levels of asbestos found on the surface of the Road. In addition, especially in the vicinity of the upper tailings pond, vermiculite mine tailings (and associated asbestos up to 5% by PLM) can be found in the subsurface and shoulder of Rainy Creek Road. This indicates that the vermiculite tailings were incorporated into the road base, either through original construction or road repair. The third way that contamination has come to be found in or along Rainy Creek Road is in the remnants of former material stockpiles, or the use of vermiculite in runaway truck ramps.

The placement of the amphibole asbestos materials into and onto the Rainy Creek Road corridor constitutes a release of a hazardous substance. This release can be further aggravated by wind and human activities. For example, as discussed earlier, unless dust suppression is actively in place, truck traffic up and down the Rainy Creek Road corridor will generate significant airborne fibers. During the hauling of excavated soil from the Export Plant to the Zonolite mine by W.R. Grace, air sample data collected between

THIS AREA IS AN
EXPOSURE PATHWAY
FOR LIBBY AMPHIBOL
ASBESTOS CONTAMINATION
ON RAINY CREEK DOWN
THROUGH SUB-AREA-1* O.U.-2
TO KOOTENAI RIVER.

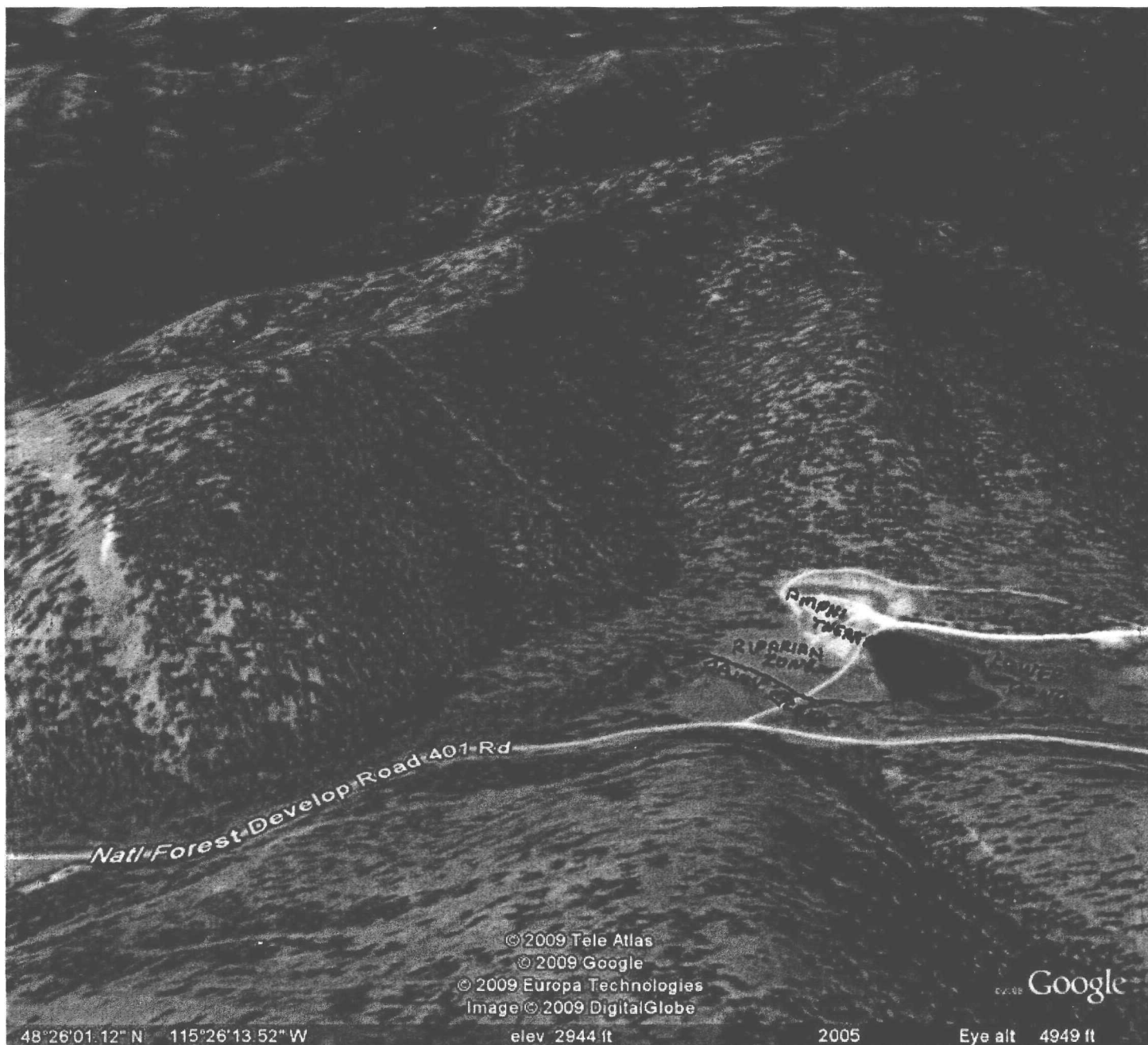
AS OF TOMORROW

OR EVEN TODAY

• IS THERE A POTENTIAL

FOR A DISASTER ON

RAINY CREEK!



CURRENT SITE OF ASBESTOS CONTAMINATED WASTE MATERIAL FROM LIBBY CLEAN-UP SITE. APPROXIMATELY 120,000 CUBIC YARDS IN PLACE AND POSSIBLY AN ADDITIONAL 300 CUBIC YARDS CONTINGENT ON AN APRIL/2010 ARMY CORPS OF ENGINEERS FIELD SURVEY OF THIS SITE IN FALL OF 2009.

ALL OF THIS MATERIAL WAS DESTINED TO GO TO THE UPPER MINE SITE (SEE ENCLOSED MAP) WHERE 500 THOUSAND CUBIC YARDS WAS DEPOSITED FROM 2001 UNTIL APPROXIMATELY 2007.

WHY ON THIS EARTH WOULD YOU WANT TO DEPOSIT MATERIAL LIKE THIS IN SUCH CLOSE PROXIMITY

AERIAL MAP OF W.R. GRACE MINE SITE
SHOWING ORIGINAL DEPOSIT OF WASTE MATERIAL
AND CURRENT AND PROPOSED FUTURE DEPOSIT
OF CONTAMINATED ASBESTOS WASTE FROM
LIBBY AMPHIBOLE CLEAN-UP SITE.



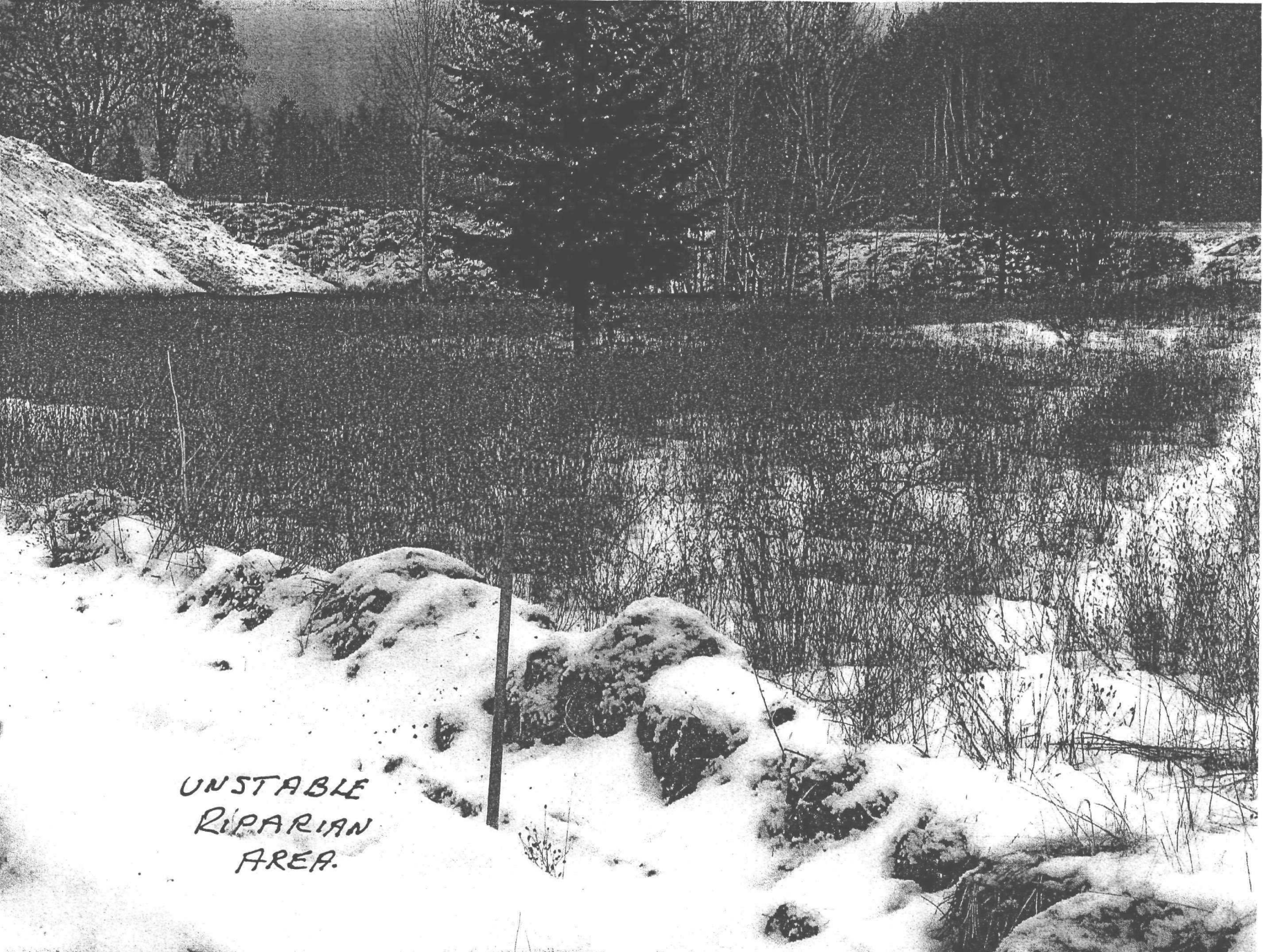
WASTE
AREA

RIPARIAN
ZONE

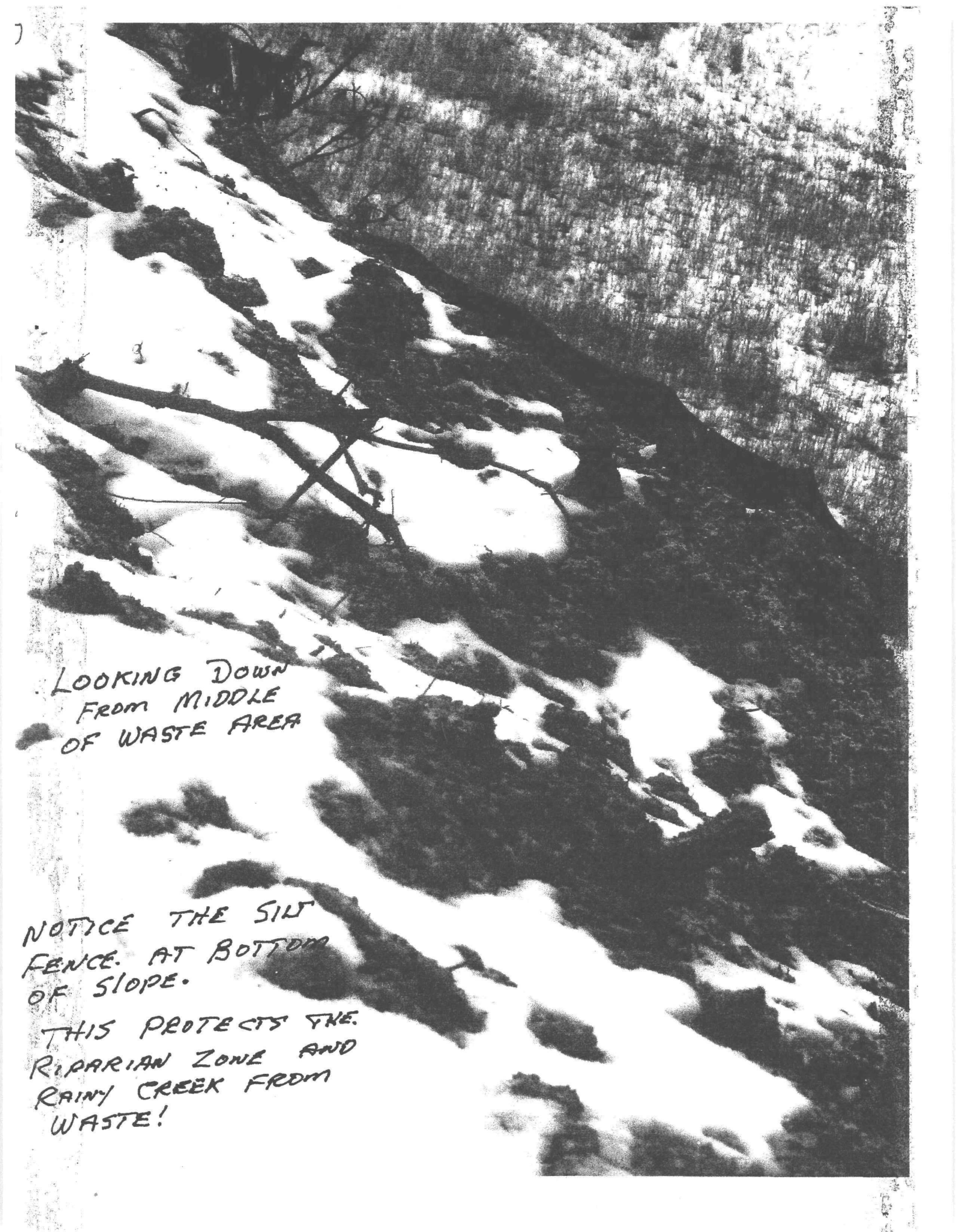
RAINY
CREEK
WATER
MONITORING
STATION

120 M³ COBK YARD
LIBBY - WASTE SITE
STAGING AREA
ADJACENT TO LOWER
POND



A black and white photograph of a riparian area in winter. The foreground is covered in snow with several large, dark rocks. A wooden stake is planted in the snow. In the middle ground, there is a dense thicket of tall, dry grasses or reeds. The background features a line of trees, including evergreens and bare deciduous trees, under a dark sky.

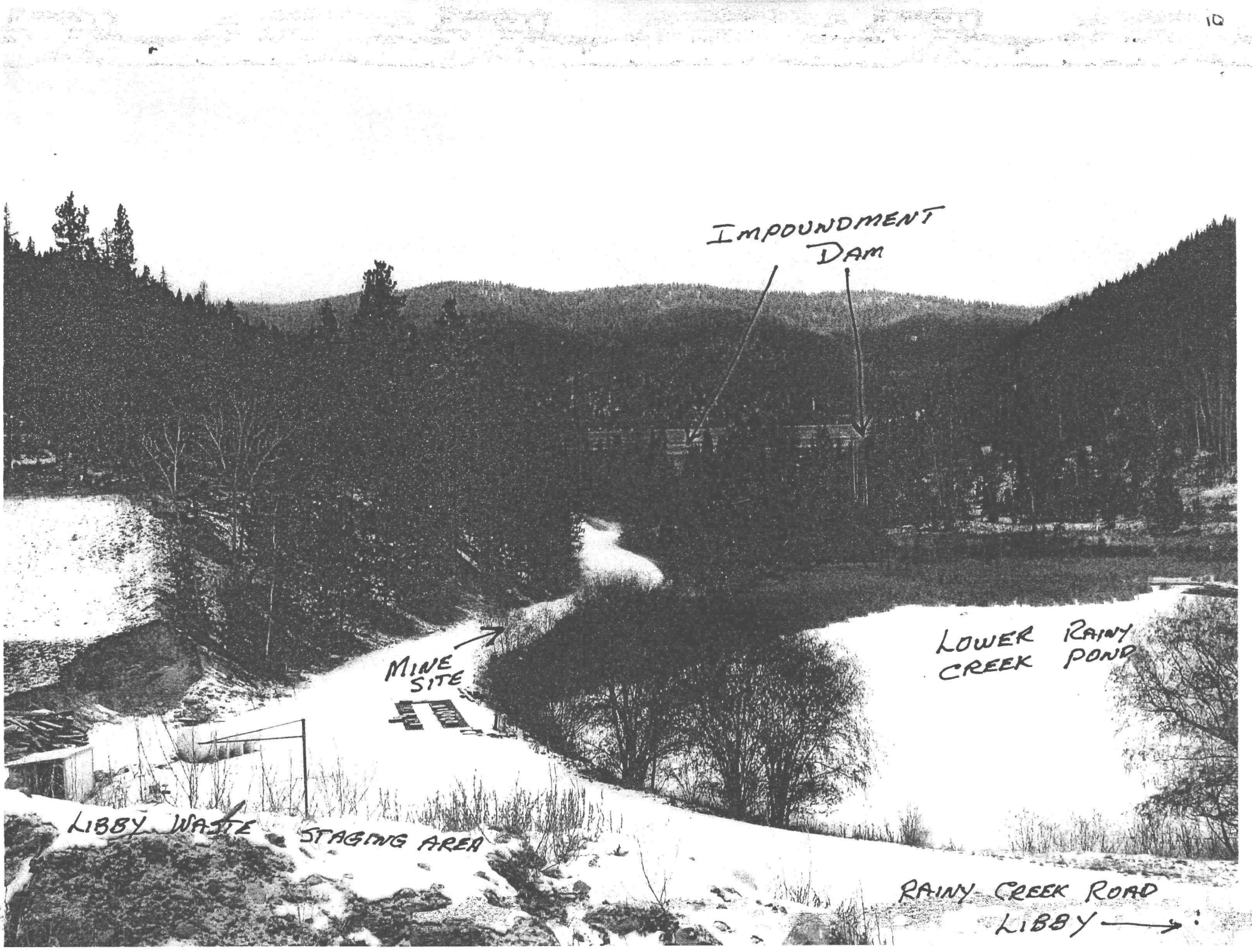
UNSTABLE
RIPARIAN
AREA.



LOOKING DOWN
FROM MIDDLE
OF WASTE AREA

NOTICE THE SILT
FENCE. AT BOTTOM
OF SLOPE.

THIS PROTECTS THE
RIPARIAN ZONE AND
RAINY CREEK FROM
WASTE!



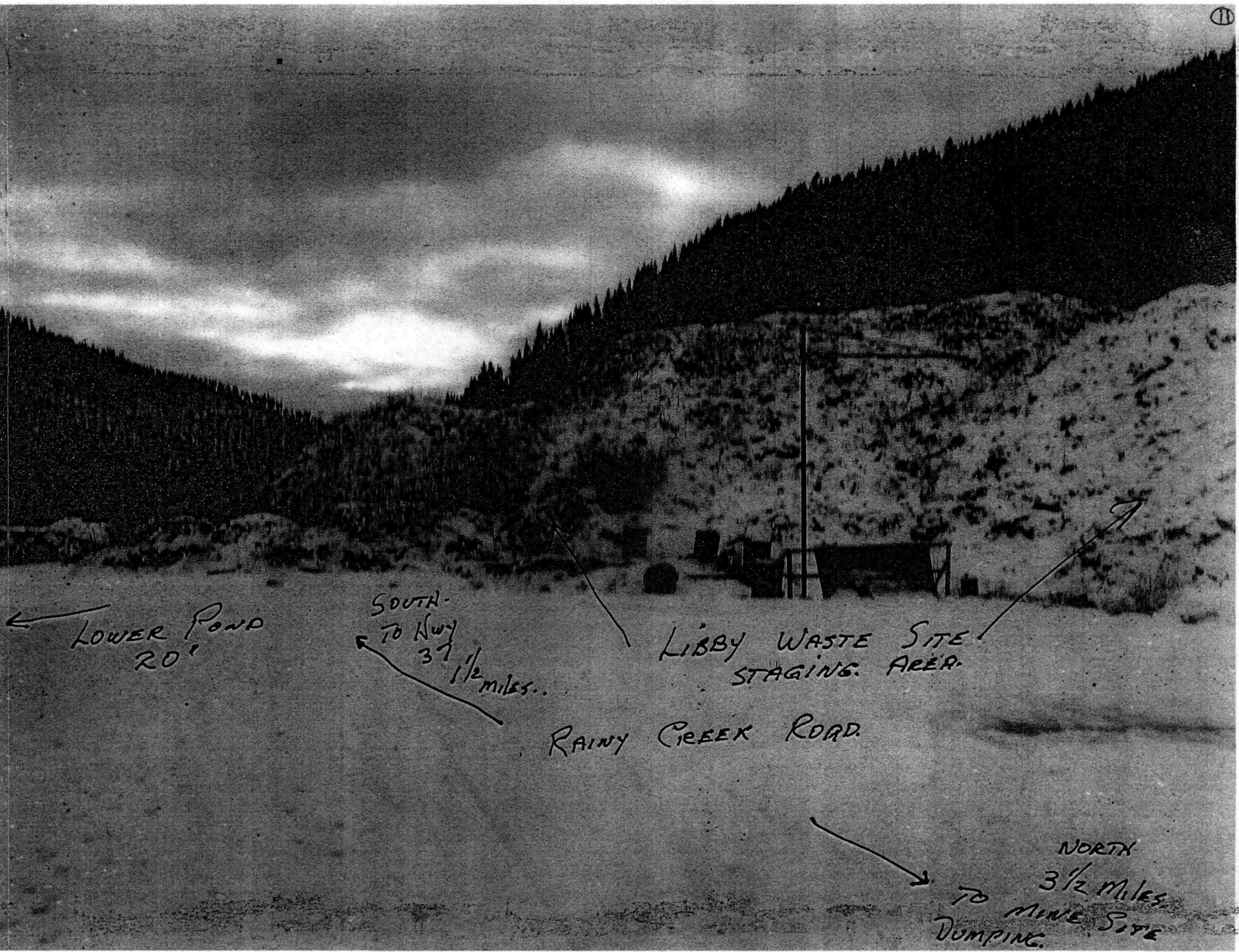
IMPOUNDMENT
DAM

MINE
SITE

LOWER RAINY
CREEK POND

LIBBY WASTE STAGING AREA

RAINY CREEK ROAD
LIBBY →



← LOWER POND
20'

SOUTH-
TO Hwy
37
1 1/2 miles..

LIBBY WASTE SITE
STAGING. AREA.

RAINY CREEK ROAD.

NORTH
3 1/2 miles
TO MINE SITE
DUMPING.